# NORCO COLLEGE Career & Technical Education

## FACILITY MAINTENANCE PROGRAM

THE OBJECTIVE

Students will learn job-related maintenance skills related to:

- safety standards
- troubleshooting
- preventative maintenance
- basic electricity
- blueprint reading
- · drive components
- · hydraulics
- · pneumatics
- ...and much more!

For information on this program, contact Derek Sy at (951) 738-7782.

### THE OUTCOME

The Facility Maintenance program prepares students for high-wage jobs as general maintenance and repair workers with local companies here in the Inland Empire. Top maintenance companies who employ maintenance workers reported a need for skills in repair, plumbing, inspection, cleaning, and hand tools. For more information on jobs in this rapidly emerging field, see reverse.

## THE PROGRAM

MAN-55: Occupational Safety and Health Administration (OSHA) Standards for General Industry (2 units) - 36 hours lecture.

MAN-68: Fundamentals of Maintenance (3 units) - 27 hours lecture and 54 hours laboratory

MAN-69: Fundamentals of Tools and Test Equipment (2 units) - 27 hours lecture and 27 hours laboratory.

ELE/ENE-27: Technical Communications (3 units) - 54 hours lecture.

ENE-51: Blueprint Reading (2 units) - 27 hours lecture and 27 hours laboratory.

ELE/MAN-77: Electrical Theory (3 units) - 54 hours lecture.

MAN-60: Hydraulic and Pneumatics Systems (3 units) - 40 hours lecture and 72 hours laboratory.

CON-66: National Electrical Code (3 units) - 54 hours lecture.

ENE-60: Math for Engineering Technology (3 units) - 54 hours lecture or MAT-36: Trigonometry (4 units) - 72 hours lecture.

625 hours of hands-on training

Certificate: 24-25 total units AS Degree: 60 total units Prerequisite: None

The Facility Maintenace program is available as a certificate and as an associate degree. The Associate of Science Degree in Facility

Maintenance will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

This project received \$1,410,433 (g 4% of total) from a grant awarded under the TAACCCT grant as implemented by the U.S. Department of Labor's Employment and Training Administration. The Riverside Community College District complies with all federal and state rules and regulations and does not discriminate on the basis of ethnic group identification, national origin, religion, age, gender, gender identity, gender expression, race, color, ancestry, genetic information, sexual orientation, physical or mental disability, or any characteristic listed or defined in Section 11.135 of the Government Code or any characteristic that is contained in the prohibition of hate crimes set forth in subdivision (1) of Section 42.6 of the California Penal Code, or any other status protected by law. Inquiries regarding compliance, and/or grievance procedures may be directed to the District's Title IX Officer/Section 504/ADA Coordinator, 3801 Market Street., Riverside, CA 92501. (951) 222-8039 Alternate formats for this material are available to individuals requiring disability accommodation. Please contact Jesse Lopez or the office of Diversity, Equity and Compliance at (951) 222-8039.

## Job Opportunities

In the Riverside-San Bernardino-Ontario area, the facility maintenance occupation group is expected to increase nine percent between 2015 and 2020. During the five-year projections period nearly 3,600 jobs openings will be available due to new job growth and replacement need (e.g. retirements), or more than 700 job openings each year.

Source: EMSI

Occupations	Average Hourly Earning
Electro-Mechanical Technicians	\$36.30
Mechanical Engineering Technicians	\$23.25
Maintenance Workers, Machinery	\$20.13
Maintenance and Repair Workers, General	\$19.29
Helpers-Installation, Maintenance, and Repair Workers	\$15.01

Source: Burning Glass

#### Electro-Mechanical Technicians

Operate, test, maintain, or calibrate unmanned, automated, servomechanical, or electromechanical equipment. May operate unmanned submarines, aircraft, or other equipment at worksites, such as oil rigs, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.

## Maintenance and Repair Workers, General

Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors or stairs

Visit www.norcocollege.edu/ace or call Derek Sy at (951) 738-7782 for more information.



# Mechanical Engineering Technicians

Apply theory and principles of mechanical engineering to modify, develop, test, or calibrate machinery and equipment under direction of engineering staff or physical scientists.



#### Maintenance Workers, Machinery

Lubricate machinery, change parts, or perform other routine machinery maintenance.

#### Helpers--Installation, Maintenance, and Repair Workers

Help installation, maintenance, and repair workers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers.